



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------------|------------------|
| 09/601,311 | 08/04/2000 | Yoshihiro Ishikawa | 195466US2PCT | 8290 |
| 22850 | 7590 | 09/14/2005 | | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER NGUYEN, STEVEN H D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2665 | |

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/601,311

Applicant(s)

ISHIKAWA, YOSHIHIRO

Examiner

Steven HD Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin (USP 6347091) in view of Quick (USP 5673259).

Wallentin discloses a traffic control for base station, mobile (Fig 2) and method for mobile data communications in a mobile communication system of a scheme using spread signals including CDMA, where two types of communication channels including a common channel and a plurality of individual channels are provided such that the common channel (Col. 2, lines 44-45, shared channel) is set to be used by a plurality of users together and each individual channel (Col. 2, lines 42-44, dedicated channel) is set to be used exclusively by one user, the traffic control method for mobile data communications characterized by carrying out a communication using the common channel (Col. 2, lines 44-45, shared channel), between a mobile radio terminal (Fig 2, Ref 30) and a radio base station (Fig 2, Ref 28); and carrying out an admission judgment for a shift from the common channel to the individual channel at the radio base station or the mobile radio terminal, when a communication traffic at the mobile radio terminal is shifting from a sparse state to a dense state during the communication (Fig 10, Ref 70 of base station and Ref 80 of the mobile are a connection state selector "CSS" for controlling the admission of communication data into the shared channel or the dedicated channel by switching

Art Unit: 2665

between them when the communication data changes from slow flow to fast flow, See col. 5, lines 43 to col. 6, lines 45, col. 9, lines 39-48) and shifting from the communication using the common channel to the communication using the individual channel between the mobile radio terminal and the radio base station (Fig 5, Ref 56). However, Wallentin fails to fully disclose a method and system shifting from the communication using the common channel to the communication using the individual channel between the mobile radio terminal and the radio base station when an admission of the shift is possible based on the result of dedicated channel allocation. In the same field of endeavor, Quick discloses a method and system for switching from a shared channel to dedicated channel, when the mobile station is shifting from a slow flow to a fast slow when an admission of the shift is possible, based on the allocated dedicated channel result and traffic condition of the shared channel (See col. 3, lines 35-45, Col. 4, lines 22-38, col. 11, lines 5-52 and col. 26, line 12 to col. 27, line 52).

Since, Anderson suggests that the system dynamically is allocated a dedicated channel to the mobile based on traffic of the mobile for shifting communication from common channel to dedicated channel. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for switching from a shared channel to dedicated channel based on the result of the allocated dedicated channel as disclosed by Quick into the system and method of Wallentin. The motivation would have been to improve the throughput of the system and reduce transmission delay and congestion.

3. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin and Quick as applied to claim 1 above, and further in view of the admitted prior arts.

Wallentin discloses the admission judgment for the shift from the common channel to the individual channel is carried out, at the radio base station according to information on an uplink interference amount which is an amount of received interferences and/or a downlink transmission power level which is a power level transmitted from the radio base station, or at the mobile radio terminal by receiving information on the uplink interference amount that is transmitted from the radio base station and according to the received information on the uplink interference amount (Fig 11, col. 11, lines 54-66, col. 12, lines 5-17, 33-55, The CSS Radio and mobile of Fig 10, switch the communication channel from the common "shared" channel to dedicated channel "individual channel" based on the uplink and downlink interference amount). Quick discloses a transmission power and interference (col. 2, line 64 to col. 3, line 13). However, Wallentin and Quick fail to fully disclose a method and system for switching from common channel to individual channel based on interference and transmission power. In the same field of endeavor, the applicant admitted that a method and system for admission a call into a system based on the interference and transmission power (See Page 2, first para).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for admitting a call based on transmission power and interference as disclosed by the applicant into the system and method of Wallentin and Quick. The motivation would have been to utilize the system resource more efficiency.

4. Claim 3-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin and Quick as applied to claim 1 above, and further in view of Kumar (USP 6418148).

Wallentin discloses when an admission of the shift is not possible as a result of the admission judgment for the shift from the common channel to the individual channel so that the

Art Unit: 2665

communication is to be kept on the common channel (Fig 5, Ref 59 discloses the communication can not switch to the dedicated channel, the communication is to be kept on the common channel, See col. 6, line 61 to col. 7, line 9 and col. 12, lines 43-52) and Quick discloses a method and system for switching from a shared channel to dedicated channel, when the mobile station is shifting from a slow flow to a fast slow, based on the allocated dedicated channel result and traffic condition of the shared channel (See col. 3, lines 35-45, Col. 4, lines 22-38, col. 11, lines 5-52 and col. 26, line 12 to col. 27, line 52). However, Wallentin and Quick fail to expressly disclose waiting a prescribed period of time for restarting an individual channel set up operation, which is determined according to a random number and different from the timing for retransmitting set up for other mobile radio terminals. Kumar discloses receiving a request for a supplemental channel, which is analogous to an individual channel, and if the request cannot be satisfied, the node that submitted the request is asked to resubmit is request after a random back-off period (col. 9, lines 4-19). Figure 3 shows that the back-off periods for different nodes may be set to the different periods of times. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to reject requests at the radio base station of Wallentin and Quick if no resources were available for a particular request, and to wait a random period of time before retrying. One of ordinary skill in the art would have been motivated to do this in order to assign the mobile radio terminal requesting an individual the necessary resources when they became available, and to limit contention between different mobile radio terminals that may request resources at the same time.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kudrimoti (USP 6751193) discloses a system for requesting a different channel based on the traffic flow and back-off for a random of time before retrying.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

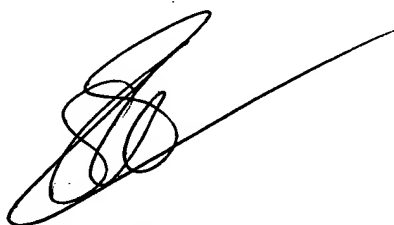
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2665

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Steven HD Nguyen
Primary Examiner
Art Unit 2665
9/12/05